DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/Ala Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-011348 Address: 333 Burma Road **Date Inspected:** 26-Dec-2009

City: Oakland, CA 94607

Project Name: SAS Superstructure OSM Arrival Time: 1900 **OSM Departure Time:** 700 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: See below **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** Tower and OBG Components

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance Inspector George Goulet was present during the times noted above for observations relative to the work being performed.

Bay 10

This QA Inspector randomly observed the following work in progress in Bay 10:

FCAW repair welding of weld joint SSTL4-1B/L-5B located inside PCMK south tower, lift 4, skin B to skin C, between approximately 118M and 118.5M elevations. Welder was identified as 053870. ZPMC QC was identified as CWI Wang Chuan Qing (QC1). Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC Jiang Xiao Bo, who was not a CWI. The welding variables recorded by QC1's assistant appeared to comply with WPS-345-FCAW-2G(2F)-repair as listed on ZPMC repair report #T-CWR511.

SMAW tack welding of temporary steel channel used to transport plates and assemblies into the tower shaft located inside PCMK south tower, lift 4, single diaphragm and double diaphragms at various elevations. Welder was identified as 053469. ZPMC QC was identified as QC1. The welding variables recorded by QC1 appeared to comply with WPS-B-P-2112 for the single diaphragm and WPS-B-T-4112 for the double diaphragms.

ZPMC personnel performing magnetic particle inspection (MT) inside PCMK south tower, lift 4, skin C to 119M double diaphragm welds.

WELDING INSPECTION REPORT

(Continued Page 2 of 2)

SMAW tack welding of temporary steel brackets outside PCMK south tower, lift 2, skin E, at 56M to 57M elevations. Welders were identified as 040518, 040324. ZPMC QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC Jiang Xiao Bo, who was not a CWI. The welding variables recorded by QC1's assistant appeared to comply with WPS-B-P-2113.

Blast Shop #1

This QA Inspector and Caltrans QA Inspector Paul Dawson performed random visual inspections of the upper interior areas of OBG Segment 8AW between panel point 61 to panel point 62 as per ZPMC request number 2345. ZPMC had recently completed grit blasting of these areas and the steel surfaces were mostly free of rust oxide and other contaminants that had previously obscured portions of the plate and weld surfaces. This QA Inspector visually observed approximately 30 locations that required grinding to resolve visual weld spatter, arc strikes, shallow nicks, scrapes, and other minor surface rejections. The areas were marked with colored chalk and ZPMC had several workers using grinders to remove the visually unacceptable areas and ZPMC had assigned a magnetic particle test (MT) inspector to perform MT of the arc strike removal areas upon completion of grinding the area marked. The obvious arc strikes were marked for grinding and MT.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Serge Sinevod, 134-8257-0045, who represents the Office of Structural Materials for your project.

Inspected By:	Goulet,George	Quality Assurance Inspector
Reviewed By:	Dawson,Paul	QA Reviewer